1000SX Module for 500 Series Switches

User Guide

696948-001

Year 2000 capable

An Intel product, when used in accordance with an associated documentation, is "Year 2000 Capable" when, upon installation, it accurately stores, displays, processes, provides, and/or receives data from, info, and between the twentieth and twenty-first centuries, including leap year calculations, provided that all other technology used in combination with said product properly exchanges date data with it.

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1 Quick Start

Warning

This product is an electrostatic sensitive device. Do not open the bag containing the printed circuit board unless the working area is static-free.

Electrostatic Sensitive Device

Do not handle the printed circuit board unless the working area is static-free!

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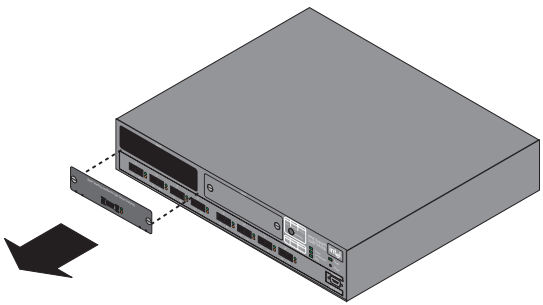
Start-up

Start-up

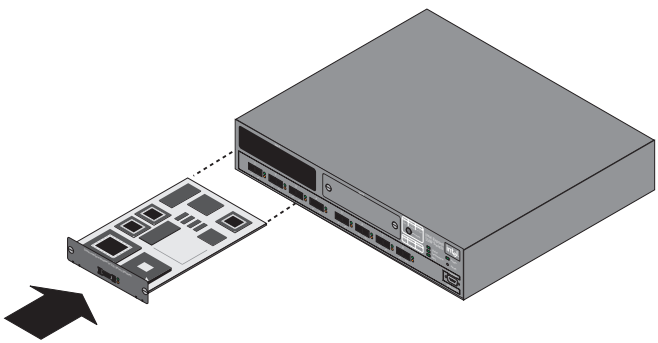
Follow these instructions to install a 1000SX Module in your Intel Express 500 Series Switch:

1 Turn off the power, then unscrew and remove the panel covering the expansion slot on the Express 500 Series Switch.



Note: for 550T and 550F, use either slot. For 510T, use Slot A.

2 Plug the 1000SX Module into the slot, secure the module using the retaining screws and turn on the power**.**



3 Plug in a device and verify the link using the LEDs.

Green	Orange	Indicates
Off	Off	Port enabled, no link.
Blinking	Off	Link and data traffic.

Green	Orange	Indicates
Solid	Off	Link.
Off	Solid	Port disabled by management.
Solid	Solid	Port disabled by a fault.

2 Overview

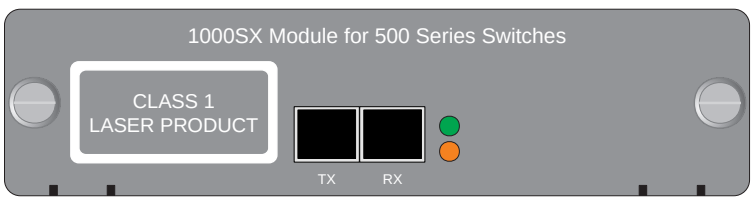
This guide covers the Intel 1000SX Module for 500 Series Switches (product code ES500MSX). The 1000SX Module supports the draft Gigabit standard (IEEE 802.3Z), full duplex only.

The module can only be used with the Intel 500 Series Switches.

1000SX Module

Introduction

The 1000SX Module acts as a switched port when plugged into an Express 500 Series Switch.



Connection distances

The 1000SX Module allows an Express 500 Series Switch to connect to another switch or a 1000BASE-SX device, which can be up to 525 meters away using 50/125-micron fiber-optic cabling, or up to 260 meters away using 62.5/125-micron fiber-optic cabling.

LED Indicators

Understanding the LEDs

The module has two LED indicators: green and orange. These indicate the following:

Green	Orange	Indicates
Off	Off	Port enabled, no link.
Blinking	Off	Link and data traffic.
Solid	Off	Link.
Off	Solid	Port disabled by management.
Solid	Solid	Port disabled by a fault.

Module Specifications

Ports and connections

The 1000SX Module has the following specifications:

Number of Ports	1
Media speed	2000 Mbps, full duplex
Connector Type	Duplex SC
Fiber Type	50/125-micron multi-mode fiber 62.5/125-micron multi-mode fiber
Link Length	50 micron: up to 1722 ft (525 m) 62.5 micron: up to 853 ft (260 m)

Physical parameters

The 1000SX Module has the following physical parameters:

Dimensions	Width: 5.9in. (149mm) Height: 1.5in. (37mm) Depth: 9.4in. (238mm)
Weight (approximate)	0.441lb. (0.2kg)
Operating Temperature	+41˚F to +104˚F (+5˚C to +40˚C)
Storage Temperature	-13˚F to +158˚F (-25˚C to +70˚C)
Humidity	Less than 85% non-condensing

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This warranty gives you specific legal rights and you may have other rights which vary from state to state. All parts or components contained in this product are covered by Intel's limited warranty for this product; the product may contain fully tested, recycled parts, warranted as if new.

Returning a Defective Product (RMA)
Before returning any product, contact an Intel Customer Support Group and obtain an RMA number by calling one of the following numbers for the applicable language in which you require support:
France+44 1793 404988
Germany+44 1793 404777
Italy+44 1793 404141
United Kingdom(+44) (0)1793 404900
If the Customer Support Group verifies that the product is defective, they will have the Return Material Authorization Department issue you an RMA number to place on the outer package of the product. Intel cannot accept any product without an RMA number on the package.

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Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

Software provided with the hardware product is not covered under the hardware warranty described above. See the applicable software license agreement which shipped with the hardware product for details on any software warranty.

This Agreement shall be governed by the laws of England and the courts of England shall have exclusive jurisdiction of any dispute arising hereunder.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The user is cautioned that changes and modifications made to the equipment without approval of the manufacturer could void the user's authority to operate this equipment.

Manufacturer Declaration

Intel declares that the Express 500 Series Switches comply with the EU Directive 89/336/EEC, using the EMC standards EN55022 and EN50082-1. These products also meet EU Directives 74/23/EEC and 93/68/ and are certified by DEMKO to be compliant with EN 60950/A1/A2/A3 and by UL to be compliant with UL 1950 and CSA -C22.2 No. 950. These products have been tested and verified to meet CISPR 22 Class A requirements and are registered with VCCI Class 1 products.

WARNING: Fiber-optic ports—Optical Safety

Never look directly at the fiber TX laser port and fiber cable ends when they are powered-up.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING

The system is designed to operate in a typical office environment. Choose a site that is:

- Clean and free of airborne particles (other than normal room dust).
- Well ventilated and away from sources of heat including direct sunlight.
- Away from sources of vibration or physical shock.
- Isolated from strong electromagnetic fields produced by electrical devices.
- In regions that are susceptible to electrical storms, we recommend you plug your system into a surge suppressor and disconnect telecommunication lines to your modem during an electrical storm.
- Provided with a properly grounded wall outlet.

Do not attempt to modify or use the supplied AC power cord if it is not the exact type required.

Ensure that the system is disconnected from its power source and from all telecommunications links, networks, or modems lines whenever the chassis cover is to be removed. Do not operate the system with the cover removed.

AVERTISSEMENT

Le système a été conçu pour fonctionner dans un cadre de travail normal. L'emplacement choisi doit Ítre:

- Propre et dépourvu de poussière en suspension (sauf la poussière normale).
- Bien aèrè et loin des sources de chaleur, y compris du soleil direct.
- A l'abri des chocs et des sources de ibrations.
- Isolé de forts champs magnétiques géenérés par des appareils électriques.
- Dans les régions sujettes aux orages magnétiques il est recomandé de brancher votre système à un supresseur de surtension, et de débrancher toutes les lignes de télécommunications de votre modem durant un orage.
- Muni d'une prise murale correctement mise à la terre.

Ne pas utiliser ni modifier le câble d'alimentation C. A. fourni, s'il ne correspond pas exactement au type requis.

Assurez vous que le système soit débranché de son alimentation ainsi que de toutes les liaisons de télécomunication, des réseaux, et des lignes de modem avant d'enlever le capot. Ne pas utiliser le système quand le capot est enlevé.

WARNUNG

Das System wurde für den Betrieb in einer normalen Büroumgebung entwickelt. Der entwickelt. Der Standort sollte:

- sauber und staubfrei sein (Hausstaub ausgenommen);
- gut gelüftet und keinen Heizquellen ausgesetzt sein (einschliefflich direkter Sonneneinstrahlung);
- keinen Erschütterungen ausgesetzt sein;
- keine starken, von elektrischen Geräten erzeugten elektromagnetischen Felder aufweisen;
- in Regionen, in denen elektrische Stürme auftreten, mit einem Überspannungsschutzgerät verbunden sein; während eines elektrischen Sturms sollte keine Verbindung der Telekommunikationsleitungen mit dem Modem bestehen;
- mit einer geerdeten Wechselstromsteckdose ausgerüstet sein.

Versuchen Sie nicht, das mitgelieferte Netzkabel zu ändern oder zu verwenden, wenn es sich nicht um genau den erforderlichen Typ handelt.

Das System darf weder an eine Stromquelle angeschlossen sein noch eine Verbindung mit einer Telekommunikationseinrichtung, einem Netzwerk oder einer Modem-Leitung haben, wenn die Gehäuseabdeckung entfernt wird. Nehmen Sie das System nicht ohne die Abdeckung in Betrieb.

AVVERTENZA

Il sistema è progettato per funzionare in un ambiente di lavoro tipico. Scegliere una postazione che sia:

- Pulita e libera da particelle in sospensione (a parte la normale polvere presente nell'ambiente).
- Ben ventilata e lontana da fonti di calore, compresa la luce solare diretta.
- Al riparo da urti e lontana da fonti divibrazione.
- Isolata dai forti campi magnetici prodotti da dispositivi elettrici.
- In aree soggette a temporali, è consigliabile collegare il sistema ad un limitatore di corrente. In caso di temporali, scollegare le linee di comunicazione dal modem.

- Dotata di una presa a muro correttamente installata.

Non modificare o utilizzare il cavo di alimentazione in c. a. fornito dal produttore, se non corrisponde esattamente al tipo richiesto.

Prima di rimuovere il coperchio del telaio, assicurarsi che il sistema sia scollegato dall'alimentazione, da tutti i collegamenti di comunicazione, reti o linee di modem. Non avviare il sistema senza aver prima messo a posto il coperchio.

ADVERTENCIAS

El sistema está diseñado para funcionar en un entorno de trabajo normal. Escoja un lugar:

- Limpio y libre de partículas en suspensión (salvo el polvo normal)
- Bien ventilado y alejado de fuentes de calor, incluida la luz solar directa.
- Alejado de fuentes de vibración.
- Aislado de campos electromagnéticos fuertes producidos por dispositivos eléctricos.
- En regiones con frecuentes tormentas eléctricas, se recomienda conectar su sistema a un eliminador de sobrevoltage y desconectar el módem de las líneas de telecomunicación durante las tormentas.
- Previsto de una toma de tierra correctamente instalada.

No intente modificar ni usar el cable de alimentación de corriente alterna, si no se corresponde exactamente con el tipo requerido.

Asegúrese de que cada vez que se quite la cubierta del chasis, el sistema haya sido desconectado de la red de alimentación y de todos lo enlaces de telecomunicaciones, de red y de líneas de módem. No ponga en funcionamiento el sistema mientras la cubierta esté quitada.

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Software updates	✓	✓
Installation notes	✓	
Product information	✓	
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